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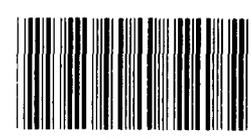
GAO

Report to the Ranking Minority Member,
Special Committee on Aging, U.S. Senate

March 1988

401(k) PLANS

Incidence, Provisions, and Benefits



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**Program Evaluation and
Methodology Division**

B-230447

March 29, 1988

The Honorable John Heinz
Ranking Minority Member
Special Committee on Aging
United States Senate

Dear Senator Heinz:

In 1980, there were over 25.5 million Americans 65 years of age or older. The U.S. Bureau of the Census estimates that this number will rise to 31.8 million by 1990 and 35.0 million by the turn of the century, constituting 13.1 percent of the total U.S. population. The welfare of these elderly Americans will be determined, in part, by the savings they themselves can contribute to their own retirement income. However, saving for a distant time of life, such as retirement, can be difficult for many workers in the face of current consumption needs. Congress has provided incentives to encourage such savings in the form of tax deferrals on contributions to retirement savings plans.

Despite the apparent popularity of such plans, little has been reported previously about how they are actually operating, especially in smaller firms. In addition, relatively little is known about the extent to which the benefits of such plans are distributed to less highly paid as well as more highly paid employees.

This report is in response to your request for information on employer-sponsored retirement savings plans provided for under section 401(k) of the Internal Revenue Code, and formally known as cash or deferred arrangements (CODAs). Our report is based on a survey of nearly 5,000 employers conducted in 1987. It provides information on four issues raised in your letter and subsequent discussions: (1) the incidence of 401(k) plans and their relationship to other types of retirement plans; (2) the variation in plan provisions and experiences across firms, and the relationship between firm characteristics, especially size, and plan provisions and experiences; (3) the extent to which plans benefit employees at various salary levels; and (4) anticipated effects of the Tax Reform Act of 1986 on 401(k) plans.

Cash or deferred arrangements are employer-sponsored plans through which employees can defer receipt of a portion of current earnings and contribute them to an individual account as retirement savings. Within

limits, these contributions are not treated as current income for tax purposes, so that income taxes on the contributions and the earnings they generate are deferred until the funds are distributed to the participant or his or her estate, normally at retirement, death, disability, age 59-1/2, or termination of employment. Many plans also provide for employer contributions, often matched to participants' contributions using some formula. These employer contributions also are tax-deferred income to participants and are deductible from corporate taxable income, within limits.

The characteristic emphasis on personal saving in 401(k) plans also involves constraints on access to those funds. But for many employees, particularly those with lower incomes, saving for retirement may be something of a luxury, given immediate financial needs. Higher income employees, as well, might see opportunity costs in contributing to these plans instead of investing in other ways.

To overcome some of these tensions, many 401(k) plans are structured to permit flexibility. Participants may be permitted to borrow against the assets accumulated in their accounts, and in most cases, money can be withdrawn from those accounts to meet financial hardships. In addition, participants may be allowed to direct how the assets in their accounts are invested. However, this very flexibility may work counter to the explicit policy of encouraging retirement savings that underlies the tax incentives applicable to plans qualified under section 401(k). Thus, the issue that frames much of the public discussion of 401(k) plans is how the tradeoffs between the retirement savings and flexibility features of the plans are implemented in practice.

With regard to the first question, on the incidence of 401(k) plans and their relationship to other types of retirement plans, we found that only about 4 percent of all U.S. corporations represented by our sample respondents (about 35,000 firms out of 793,000) sponsor 401(k) plans. (This finding applies only to firms represented by our respondents; assuming that some nonrespondents also sponsor 401(k) plans, it seems likely that the total number of sponsoring firms is somewhat higher.)

We also found that most 401(k) plan sponsors provided other retirement plans as well, and most made matching contributions to their 401(k) plans. Only 31 percent of 401(k) plans were the sole retirement plan offered by an employer, and these tended to be found in smaller companies. About 75 percent of sponsoring employers provided matching or discretionary contributions in addition to employee salary reductions,

with firms employing over 500 workers somewhat more likely to make such contributions than smaller firms.

We found that incidence was closely related to firm size; nearly all firms with 5,000 or more employees sponsored 401(k) plans in 1986. Thus, about 5.2 million employees (almost 6 percent of all full-time civilian workers in the United States) were eligible to participate in the plans represented by our respondents in 1986, and 62 percent of these (about 3.2 million employees) made contributions to the plans that year. These contributions totaled almost \$9 billion, or about \$2,800 per contributor, including about \$2,000 in deferred salary and \$800 in employer matching contributions. If we assume that the nonrespondents in our sample would have answered in the patterns typical of responding firms, our estimate of the total number of eligible employees would have been 8.7 million, with 5.3 million actually contributing in 1986. These numbers suggest that our estimates are consistent with those of other studies cited in the text. We emphasize, however, that our survey and analysis do not provide an adequate basis to substantiate these higher estimates of eligible and contributing employees.

With regard to the second question, on plan provisions and experiences, we found that despite the loan and hardship withdrawal provisions that allow access to funds before retirement, 401(k) plans are used predominantly as retirement savings plans, and not as tax-favored ordinary savings or investment instruments. Most plans do permit loans and hardship withdrawals. But in 1986, the amount outstanding in the form of loans constituted only 1 percent of all assets in 401(k) plans, and only about 0.3 percent of 401(k) assets were withdrawn because of hardship claims.

The investment options selected by participants in those plans permitting them to direct how their plan assets are invested (representing 95 percent of the assets in all 401(k) plan trusts) showed a conservative pattern. Over two-fifths of plan assets were invested in guaranteed interest accounts (31 percent) and balanced funds (11 percent).

With regard to the third question, on the extent to which plans benefit employees at various salary levels, we found some evidence that the benefits of 401(k) plans are somewhat more concentrated among higher paid than lower paid workers. According to one study we examined, about 34 percent of 401(k) plan contributors had salaries of \$30,000 or more in 1983, compared with only about 15 percent of all workers.

Moreover, according to the same study, 401(k) plan participants with salaries of \$30,000 or more tended to make larger contributions to the plans than those with lower salaries. About 68 percent of the over-\$30,000 group contributed \$1,200 or more to their plan accounts in 1983, whereas 53 percent of participants with salaries of \$10,000 to \$29,999 contributed less than \$1,200. Data from our survey indicate that the average percentage of salary and wages deferred by the higher paid plan participants was 5.4 percent, compared with 3.8 percent for lower paid participants. Taken together, these data suggest that higher paid employees were better able to take advantage of the tax deferrals for plan contributions.

Finally, turning to the fourth question on expectations for the future, we believe, based on this study, that some of the provisions of the Tax Reform Act of 1986 could reduce employee participation in or contributions to 401(k) plans. For most of the changes made in the act, most of our respondents tended to report little expectation of change. But significant percentages did predict decreased participation and contributions among the higher paid group of employees in their firms. For lower paid workers, pluralities indicated that the new limitations on hardship withdrawals and the 10 percent excise tax on early withdrawals would reduce participation and contribution levels.

Our findings are based on a survey of a sample of 4,995 corporations nationwide conducted during 1987. The sample consisted of a probability sample of 4,000 companies selected by the Internal Revenue Service from corporate tax filings for tax year 1985, and 995 firms included in the Fortune Magazine list of 1,000 large companies. We achieved a response rate of about 70 percent on our survey. The responses we received have been appropriately weighted to permit us to report national estimates in our tables, graphs, and text.

Based on discussions with your representative, we did not seek agency comments on this report. The report does not deal with the operations of the Internal Revenue Service or the Department of Labor.

As we arranged with your office, we are sending copies of this report to the Senate Committee on Finance, Senate Committee on Labor and Human Resources, Senate Committee on Small Business, House Select Committee on Aging, House Committee on Ways and Means, House Committee on Education and Labor, House Committee on Small Business,

and the Joint Committee on Taxation. Copies also will be made available to others who request them.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Eleanor Chelimsky". The signature is written in black ink and is positioned above the printed name and title.

Eleanor Chelimsky
Director

Contents

Letter		1
Section 1		10
Introduction	Background	10
	Objectives, Scope, and Methodology	11
Section 2		14
401(k) Plans and Other Retirement Plans	How Many Firms Offer Their Employees 401(k) Plans?	14
	How Are These Plans Related to Other Retirement Plans?	14
	401(k) Plans and Firm Size	16
	401(k) Plan Sponsorship and Industry Group	18
Section 3		20
Contributions to 401(k) Plans	Types of Contributions	20
	Elective Contributions	22
	Voluntary Contributions	24
	Changing Employee Contributions	26
	Employer Matching Contributions	28
	Amounts Contributed to 401(k) Plans	32
Section 4		34
Assets and Investment Options	Assets in Plan Accounts	34
	Investment Options Available to Participants	34
	Distribution of Assets Among Investment Options	36
	Changing Investment Options	38
Section 5		40
Loans, Withdrawals, and Distributions From Plan Accounts	Loan Provisions	40
	Hardship Withdrawals	42
	Distributions From 401(k) Plans	44
Section 6		46
Equity Issues and Plan Participants	Eligibility and Participation in 401(k) Plans	46
	Types of Employees Covered by 401(k) Plans	48
	Minimum Age and Service Requirements	50
	Vesting in Plan Assets	52
	Integration With Social Security	54
	Salary Breakpoints Under the ADP Test	56

<hr/>	
Section 7	58
Overall Assessment	
<hr/>	
Section 8	60
Tax Reform and 401(k) Plans	
The \$7,000 Limit on Contributions	60
Greater Restrictions on Early Withdrawals	62
Excise Tax on Early Withdrawals	64
Excise Tax on Distributions Above \$112,500	66
Uniform Definition of Highly Compensated	68
More Restrictive ADP Test	70
Anticipated Overall Effects of Tax Reform	72
<hr/>	
Appendixes	
Appendix I: Request Letter	74
Appendix II: Sampling and Survey Information	76
<hr/>	
Glossary	79
<hr/>	
Tables	
Table 2.1: Types of Retirement Plans Offered by Firms in 1986	15
Table 3.1: Percent of Plans With Various Contribution Features by Firm Size in 1986	21
Table 3.2: Total Employee and Matching Employer Contributions in 1986	33
Table 5.1: Percent of Plans With Provisions for Loans and Hardship Withdrawals, by Firm Size, in 1986	41
Table 5.2: Distributions From 401(k) Plans, by Firm Size, in 1986	45
Table 8.1: Expected Effects of the \$7,000 Contribution Limit on Employee Participation, and Employee and Employer Contributions	61
Table 8.2: Expected Effects of Withdrawal Restrictions on Employee Participation, and Employee and Employer Contributions	63
Table 8.3: Expected Effects of the 10-Percent Excise Tax on Employee Participation, and Employee and Employer Contributions	65
Table 8.4: Expected Effects of the 15-Percent Excise Tax on Employee Participation, and Employee and Employer Contributions	67

Table 8.5: Expected Effects of the Uniform Definition of "Highly Compensated" on Employee Participation and Employee and Employer Contributions	69
Table 8.6: Expected Effects of the More Restrictive ADP Test on Employee Participation, and Employee and Employer Contributions	71
Table II.1: Sample Strata and Survey Responses.	77
Table II.2: Sampling Errors for Major Findings	78

Figures

Figure 2.1: Percent of Firms Sponsoring 401(k) Plans by Number of Employees in 1986	17
Figure 2.2: Distribution of 401(k) Plans by Industry in 1986	19
Figure 3.1: Percentage Limits on Before-Tax (Elective) Contributions to 401(k) Plans in 1986	23
Figure 3.2: After-Tax (Voluntary) Contributions Permitted, by Number of Employees, in 1986	25
Figure 3.3: Frequency With Which Participants Could Change Contribution Level in 1986	27
Figure 3.4: Level of Employer Match Per \$1 of Employee Contribution in 1986	29
Figure 3.5: Maximum Percentage of Salary Contributed to 401(k) Plan That Sponsoring Firm Would Match in 1986	31
Figure 4.1: Investment Options Offered 401(k) Plan Participants in 1986	35
Figure 4.2: Percent of Plan Assets by Type of Investment Option for Plans Permitting Participants to Choose Options in 1986	37
Figure 4.3: Frequency With Which Participants Could Change Investment Options in 1986	39
Figure 5.1: Permissible Reasons for Hardship Withdrawals in 1986	43
Figure 6.1: Median Percent of Employees Eligible to Participate in 401(k) Plans, by Firm Size, in 1986	47
Figure 6.2: Types of Employees Eligible to Participate in 401(k) Plans in 1986	49
Figure 6.3: Minimum Age Requirements for 401(k) Plan Eligibility in 1986	51
Figure 6.4: Number of Years to Full Vesting in 1986	53
Figure 6.5: Integration of 401(k) Plan Benefits With Social Security, by Number of Employees, in 1986	55

Figure 6.6: Salary Breakpoints for the One-Third, Two-Thirds ADP Test in 1986

57

Abbreviations

ADP	Average deferral percentage
BLS	U.S. Bureau of Labor Statistics
BMF	Business Master File
CODA	Cash or deferred arrangement
ERISA	Employee Retirement Income Security Act of 1974
ESOP	Employee stock ownership plan
IRA	Individual retirement account
IRS	U.S. Internal Revenue Service
PAYSOP	Payroll-based tax credit employee stock ownership plan

Introduction

The possibility that Social Security coupled with private pension funds might not provide adequate income in the future for the increasing proportion of the U.S. population in retirement has been a concern of policymakers and the public at large for several years. Related to this is a more general concern about the relatively low rate of saving among Americans, a major macro-economic issue in recent decades. One way to help insure that retirees will not face a crisis and simultaneously to address the savings rate problem is to promote private saving for retirement. Congress has provided some encouragement in this direction through tax incentives that permit deferral (within limits) of personal income taxes on contributions to and earnings of qualified employer-sponsored retirement savings plans, and deductions (again, within limits) from taxable corporate income of employer contributions to such plans.

In this briefing report, we examine one type of such plan, the cash or deferred arrangement (CODA), commonly known as a 401(k) plan. Our report is based on a survey of nearly 5,000 firms and provides information on the incidence of 401(k) plans, major plan provisions and experiences, the equity issues involved in 401(k) plans, and views of plan sponsors on the likely effects of tax reform on key aspects of the plans.

Background

As early as the mid-1950s, cash or deferred profit-sharing option plans received preferential tax treatment. Under these plans, participants could authorize the employer to withhold a specific portion of salary on a regular basis and contribute it into the plan, along with any employer contribution. These contributions were not considered "constructively received income" for tax purposes. Thus, contributions to the plans were exempt from taxation until the employee withdrew the funds, generally upon retirement, death, termination from employment or some other specific event. Plans were qualified for such tax treatment if at least half of the participants were in the lower two-thirds of all firm employees in earnings.

In 1972, the Internal Revenue Service (IRS) proposed regulations that would have reversed this treatment of CODA plans by making the deferred salary taxable. However, in the Employee Retirement Income Security Act (ERISA) of 1974, Congress authorized the continuation of favorable tax treatment for any CODAs established before June 28, 1974. At the same time, ERISA placed a freeze on new CODA formation so that Congress could study the use of these plans and the favorable tax treatment provided for them. CODAs subsequently were formally qualified for

favorable tax treatment in the Revenue Act of 1978, which provided for them under section 401(k) of the Internal Revenue Code.

Company-sponsored 401(k) plans can be structured in a number of ways. In addition to the salary reduction feature, they may provide for employer contributions, all or part of which may be used to match employee contributions. Plans may permit participants to withdraw funds before retirement (or age 59-1/2) to meet financial hardships, or to borrow from their accumulated holdings. Some plans permit participants to determine how the money in their accounts is invested.

Despite what appears to be the increasing popularity of these plans, some critics see problems with 401(k) plans. Some have charged that plan participation is concentrated among employees at higher salary levels, providing benefits disproportionately to those who are least dependent on the Social Security system or other forms of public retirement income. Others have questioned the justification for permitting the withdrawal or borrowing of funds from what are intended to be retirement savings accounts.

Underlying these arguments is a fundamental tension between the policy goal of encouraging private savings for retirement and the necessity of providing the flexibility and financial incentives that will induce such savings behavior. The data in this report address many of these issues.

Objectives, Scope, and Methodology

This study was conducted in response to a request from Senator John Heinz, then Chairman of the Senate Special Committee on Aging. In his letter and subsequent discussions, Senator Heinz asked us to examine the following issues:

- the number of firms offering 401(k) plans to their employees and how these plans are related to other pension plans provided by those firms;
- the variation in plan provisions and experiences across firms, especially regarding withdrawals, employer matching, and investment options;
- the extent to which 401(k) plans benefit employees at various salary levels and the nondiscrimination "breakpoints" applicable to these plans;
- the anticipated effects of provisions of the Tax Reform Act of 1986 applicable to 401(k) plans.

Since there was an expectation that many of the features of 401(k) plans might differ substantially for small and large firms, we agreed to

relate our findings for the first three issues to size of the sponsoring firm.

To address these issues, in 1987 we conducted a mail survey of a stratified random sample of nearly 5,000 corporations across the United States, with a response rate of approximately 70 percent. (For details on sampling procedures, the survey, and analyses, see appendix II.) Our sample was drawn from two sources. First, the IRS selected a systematic sample of 4,000 corporate tax filers from the Business Master File (BMF), stratified to include firms with revenues above and below \$100,000 in the 1985-1986 tax year. Second, to insure that there would be adequate representation of very large firms, we added the firms appearing on the Fortune 1,000 list published in 1986 to our sample. Disregarding duplicates, we had a total sample of 4,995 firms. The sample does not include government or tax exempt organizations, which beginning in 1986, may no longer establish plans under section 401(k).

Each firm was administered an initial questionnaire asking for the types of plans sponsored by the corporation and other information. Those firms that indicated they sponsored 401(k) plans in 1986 were sent a followup questionnaire asking for detailed information on those plans.

The procedures we used allow us to generalize only to that portion of the universe of corporations represented by actual respondents. For some analyses, however, we have made explicit assumptions about the nonresponding firms and made estimates that apply to the full universe. In addition, based on our discussions with congressional staff on their interests, we have eliminated from all tables and graphs data on firms with fewer than five employees; in any case, virtually no firms of this size in our sample sponsored a 401(k) plan. Finally, some of our analyses are based on information about participants, so our results are generalizable to this group rather than corporate 401(k) plan sponsors. Thus, the results reported here are generalizable to a universe of about 793,000 corporations with five or more employees, unless otherwise noted.

Most of the questions we asked concerned facts on plans as they stood in 1986 and, especially as regards plan provisions, are unlikely to be subject to unusual amounts of error. A few questions, however, were subjective, dealing mainly with respondents' views on the likely future effects of specific provisions of the Tax Reform Act of 1986 on their 401(k) plans. These opinions may not accurately predict the actual

**Section 1
Introduction**

effects of legislative changes, and represent only the views of respondents.

In addition to our survey data, we also cite information from the Current Population Survey and from a Bureau of Labor Statistics study in reaching some of our conclusions. These data sources are noted in the text where they are used.

401(k) Plans and Other Retirement Plans

Corporations may offer their employees a number of types of retirement plans that are qualified for favorable tax treatment under the Internal Revenue Code. In this section, we answer the first question on the incidence of 401(k) plans and how these plans are related to other retirement plans. Where appropriate, we relate this information to firm characteristics, such as size.

How Many Firms Offer Their Employees 401(k) Plans?

Because of our sampling procedures and response rates, we can generalize the findings from our survey to about 793,000 firms with 5 or more employees. Of these, about 4 percent (35,000 firms) sponsor plans with 401(k) features for their employees. Sponsoring firms employ 9.9 million workers, of whom 5.2 million (53 percent) were eligible to participate in the plans in 1986. About 3.2 million of these employees actually participated in the plans that year.

How Are These Plans Related to Other Retirement Plans?

Table 2.1 shows the incidence of various types of company-sponsored retirement plans across all corporations with more than five employees. The largest number of corporations (almost 63 percent) sponsor no retirement plans at all. The most common form of plan is the profit-sharing plan, offered to employees by more than 24 percent of all firms. While 401(k) plans are the third most common type, as noted above, only 4 percent of firms sponsor such plans.

Three additional points are worth noting here. First, as table 2.1 shows, sponsorship of every type of plan is higher for firms that sponsor 401(k) plans than for those that do not. This indicates that, to some degree, the 401(k) plan sponsors are quite different from nonsponsors. The major difference appears to be size: 401(k) plan sponsors are found disproportionately among larger companies, which also are more likely to offer most other types of plans to their employees. (Different groups of employees may be eligible for different plans offered by a firm.)

Second, 52 percent of 401(k) plan-sponsoring firms also provide profit-sharing plans. This reflects the historical connection between 401(k) and profit-sharing plans discussed in section 1. Although it is not obvious from the table, in fact, 56 percent of all 401(k) plans are part of profit-sharing plans, accounting for much of this overlap.

Finally, 31 percent of the firms that sponsor 401(k) plans sponsor no other type of retirement plan (not shown in the table). They tend to be in smaller firms.

Section 2
401(k) Plans and Other Retirement Plans

Table 2.1: Types of Retirement Plans Offered by Firms in 1986^a

Type of plan	Firms with 401(k) plan	Firms without 401(k) plan	All firms
Profit-sharing	52%	22%	24%
Defined benefit pension	22	13	14
401(k)	100	0	4
Money purchase	7	4	4
Group IRA	9	1	2
Thrift/savings	14	1	1
ESOP/PAYSOP	8	1	1
Cafeteria	8	^b	1
Stock bonus	3	^b	1
Keogh	6	0	^b
No retirement plan	0	66	63

^aColumn totals exceed 100 percent because some firms offer more than one plan.

^bLess than 0.5 percent.

401(k) Plans and Firm Size

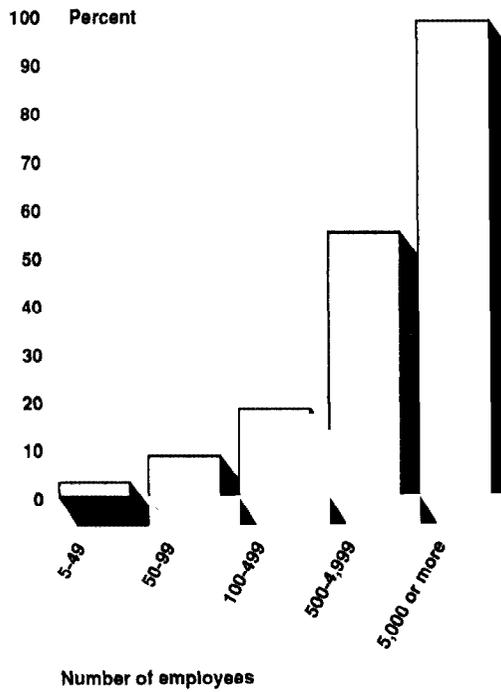
In general, 401(k) plans could be ideal retirement vehicles for smaller firms because they do not necessarily require employer contributions. But the data reported in figure 2.1 make clear that larger firms are more likely to sponsor them than are small companies. Only very small percentages of firms with fewer than 100 employees sponsor 401(k) plans. By contrast, virtually all firms with 5,000 or more employees sponsor them. The low rate of 401(k) plan sponsorship among small companies may reflect the fact that master and prototype plan provisions approved by the IRS were not available until 1987. Small firms often adopt such preapproved types of plans.

The high rate of 401(k) plan sponsorship among very large firms may not be surprising. For large firms, the 401(k) plan often is just an added feature of a profit-sharing or other defined contribution plan. The marginal costs (in administration, and so forth) of adding the 401(k) plan option to the package of benefits offered employees may not be very high for many large companies. For a small firm, however, the record-keeping, paperwork, and other costs may loom large. This is an impediment to the establishment of any retirement plan for such companies. When they do sponsor 401(k) plans, however, small companies are more likely than larger firms to use them as stand-alone retirement plans. This may reflect the relative inexpensiveness of these plans compared to, for example, defined benefit pension plans.

Despite these considerations, overall, 71 percent of 401(k) plans are sponsored by firms with fewer than 100 employees, and 29 percent by larger firms. This reflects the fact that smaller firms, though individually less likely to adopt the plans, are much more numerous. Among the firms represented by our respondents, 94 percent employed fewer than 100 employees, while 6 percent employed 100 or more.

Section 2
401(k) Plans and Other Retirement Plans

Figure 2.1: Percent of Firms Sponsoring 401(k) Plans by Number of Employees in 1986



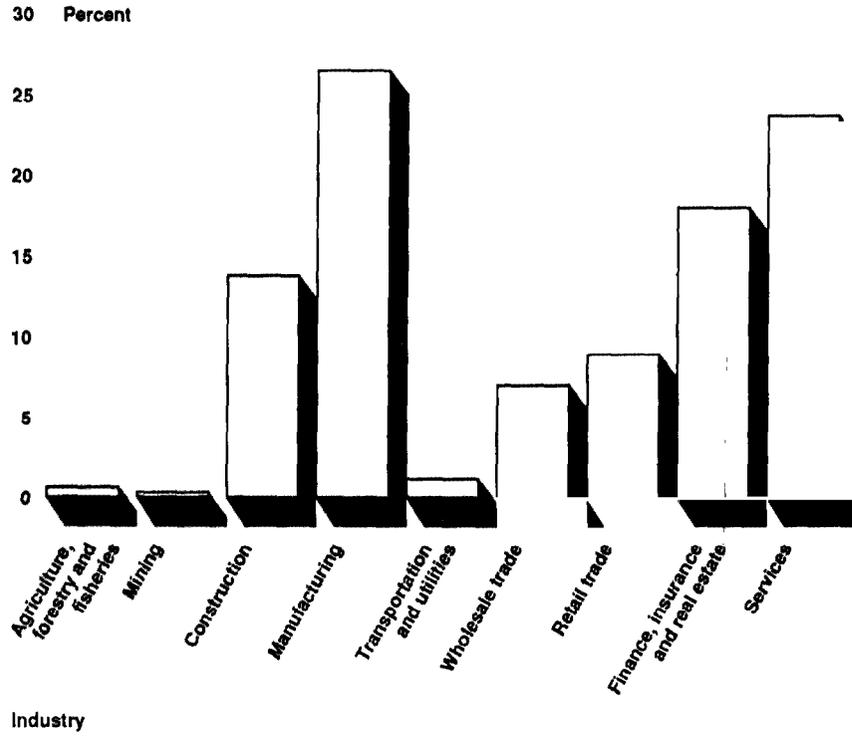
401(k) Plan Sponsorship and Industry Group

Together, three industry groups sponsor two-thirds (67 percent) of all 401(k) plans. As seen in figure 2.2, about 26 percent of plans are sponsored by manufacturing companies, 24 percent by service firms, and 18 percent by finance, insurance, and real estate companies.

The percentage of firms within each industry that sponsor 401(k) plans varies somewhat. The industries with the highest percentage of firms sponsoring 401(k) plans are finance, insurance, and real estate (10 percent), manufacturing (8 percent), and construction (7 percent), while those with the lowest sponsorship rates are in agriculture, forestry, and fisheries (1 percent), and transportation and utilities (1 percent).

Section 2
401(k) Plans and Other Retirement Plans

Figure 2.2: Distribution of 401(k) Plans by Industry in 1986



Contributions to 401(k) Plans

In sections 3, 4, and 5, we analyze the second question regarding variations in plan provisions and experiences. We focus in section 3 on employee and employer contributions to 401(k) plans. As in the previous section, we relate these variations to firm size, where appropriate.

Contributions to 401(k) plans can be made in a number of ways. The basic plan includes contributions representing a before-tax reduction in current salary on the part of employees, but additional features include employer matching or discretionary contributions and employee contributions from after-tax income.

Types of Contributions

Participants in 401(k) plans typically contribute part of their current salary into the plan. The amount contributed is determined by the participant, within plan guidelines, and usually is expressed as some fixed percentage of total salary. In addition, the participant's employer may agree to make contributions to the plan. Sometimes these contributions are made using a formula that matches some percentage of the amount contributed by the participant; such contributions are called matching contributions. Employers also may make contributions without regard to the amounts contributed by participants. These contributions are called discretionary contributions.

While sponsoring employers are not required to contribute to 401(k) plans, as shown in table 3.1, most do. Only 25 percent of all 401(k) plans involve salary reduction alone as a source of contributions. But this figure varies with firm size. Smaller firms are more likely to have plans dependent solely on salary reduction, while the largest firms generally include some form of employer contribution.

The most common type of plan overall is that providing for salary reduction plus a matching company contribution. Fully 38 percent of all companies, and 71 percent of firms with 5,000 or more employees, sponsor plans of this type. When firms providing both discretionary and matching contributions are added, over half (51 percent) of all firms and a large majority (80 percent) of the largest companies match employee contributions to some extent.

Section 3
Contributions to 401(k) Plans

Table 3.1: Percent of Plans With Various Contribution Features by Firm Size in 1986

Contribution type	Number of employees					Total
	5-49	50-99	100-499	500-4,999	5,000 or more	
Salary reduction only	26%	18%	32%	6%	15%	25%
Salary reduction plus match	42	55	32	16	71	38
Salary reduction plus discretionary	15	18	29	65	5	24
Salary reduction plus match plus discretionary	16	9	7	13	9	13

Elective Contributions

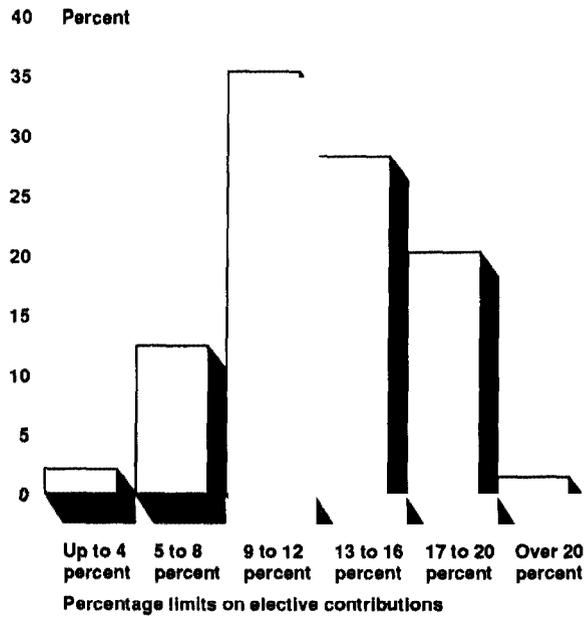
The basic idea of the 401(k) plan is to encourage the participant to save for his or her own retirement by taking some of what would have been current earnings in the form of a contribution to a retirement savings plan. Participants are not taxed on amounts contributed to the 401(k) plan nor on earnings on their accounts until the cash is taken as a distribution from plan assets. The amount of earnings so contributed is determined by the participant, in line with plan guidelines. This amount, typically expressed as a percentage of salary, is contributed to the participant's individual account in the plan. Because the level of the contribution is chosen by the participant, it is called an elective contribution. We also refer to such contributions as before-tax contributions.

The amounts that can be used to make elective contributions are generally limited. Prior to 1987, section 415 of the Internal Revenue Code limited before-tax contributions to the lesser of \$30,000 or 25 percent of compensation (total, for all plans). As a result of the Tax Reform Act of 1986, the amount that can be contributed to a 401(k) plan, effective in 1987, is \$7,000. (Antidiscrimination rules may prevent some participants from contributing up to the maximum, even if they wish to do so.) Plan sponsors may set lower dollar limits than those established by law. However, in our survey, about 2 percent of firms reported setting dollar limits on contributions lower than the section 415 limits in 1986.

As figure 3.1 shows, however, most plans did limit the percentage of salary that could be deferred as an elective contribution. About 35 percent of plans limited contributions to a range of 9 to 12 percent of salary, and 28 percent had limits of 13 to 16 percent. The most common limits were 10 percent of salary (30 percent of firms), 15 percent of salary (27 percent of firms), and 20 percent of salary (19 percent of firms).

Section 3
Contributions to 401(k) Plans

Figure 3.1: Percentage Limits on Before-Tax (Elective) Contributions to 401(k) Plans in 1986



Voluntary Contributions

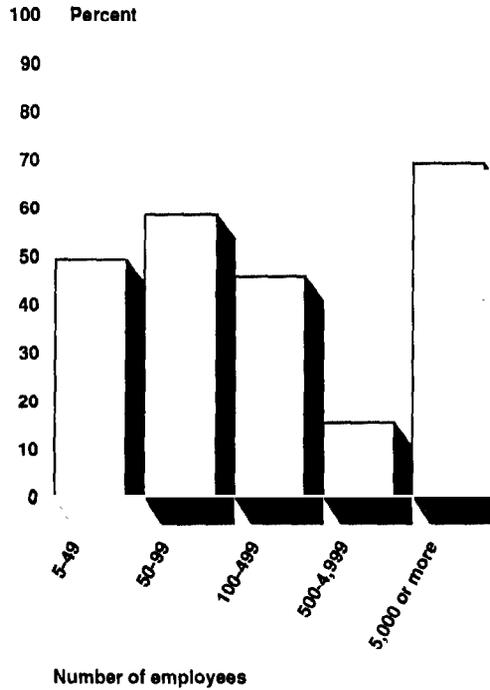
Participants in many plans are allowed to make contributions in addition to their elective contributions. The amount of such a contribution is not deducted from salary for tax purposes, but rather is treated as ordinary taxable income. As a result, these contributions are called after-tax contributions or, alternatively, voluntary contributions. These contributions are not subject to the \$7,000 limit for elective contributions (but do count against the overall section 415 limits of \$30,000 or 25 percent of compensation for all plans).

Even though the money contributed on an after-tax basis does not reduce current taxable income, the earnings on the plan assets established by those contributions are not taxed until distributed, and some employers will match these contributions. Thus, there may be tax and other financial advantages for many participants to make voluntary contributions, if allowed by the plan.

Whether a firm permits voluntary contributions to the 401(k) plan appears to depend in part on the size of the firm. Overall, 46 percent of plans provide for voluntary contributions. But as shown in figure 3.2, most firms with 5,000 or more employees (69 percent) permit voluntary contributions. Lower percentages of smaller companies, particularly those with 500 to 4,999 employees, permit such contributions. This difference between the largest and other firms may reflect the administrative problems for smaller firms of maintaining records on contributions that have very different tax implications on an employee-by-employee basis.

As with elective contributions, sponsoring firms may limit the dollar amount or salary percentage that a participant can use for voluntary contributions. Virtually none of the plans permitting after-tax contributions included a dollar limit, but most did limit the percent contributed. About 90 percent had a maximum 10 percent limit on voluntary contributions, 5 percent had a limit of less than 10 percent, and 5 percent had a higher limit.

Figure 3.2: After-Tax (Voluntary) Contributions Permitted, by Number of Employees, in 1986



Finally, in 1986, plans could require that participants first make an elective contribution before they were allowed to make a voluntary contribution. In practice, about 34 percent of plans permitting voluntary contributions had such a requirement. Among these plans, 90 percent required a 2-percent elective contribution and 8 percent required a 6-percent elective contribution before a participant can make a voluntary contribution. (The remaining 2 percent of these plans had some other percentage requirement.)

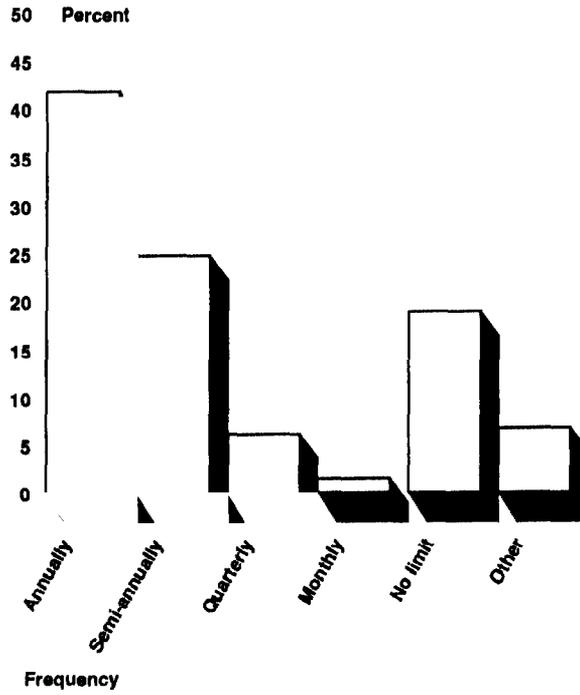
Changing Employee Contributions

In general, employees may change the level of their contributions to the 401(k) plan from time to time. This is important because, without such flexibility, the plans would be less attractive as retirement savings vehicles. Employees might not want to be locked in to a particular level of savings for long periods given that future needs for current income are subject to uncertainty. The administrative problems, however, of computing the appropriate amounts for each employee's contribution and the corresponding tax implications can be burdensome for the employer. Thus, firms have an incentive to limit flexibility to some degree.

As can be seen in figure 3.3, these considerations result in a variety of solutions to the problem of how frequently to allow participants to change contribution levels. About 42 percent of firms permit changes once a year, and another 25 percent twice a year. Thus, two-thirds of plans limit changes in contribution levels to occur only one or two times a year. This would tend to emphasize the longer-term aspects of 401(k) plan savings, because it would reduce the opportunities for participants to make short-term adjustments in their investment portfolios. Less than 19 percent of plans permit unlimited numbers of changes. Many of the 7 percent reporting "other" arrangements have different frequencies for elective and voluntary contributions.

Section 8
Contributions to 401(k) Plans

Figure 3.3: Frequency With Which Participants Could Change Contribution Level in 1986



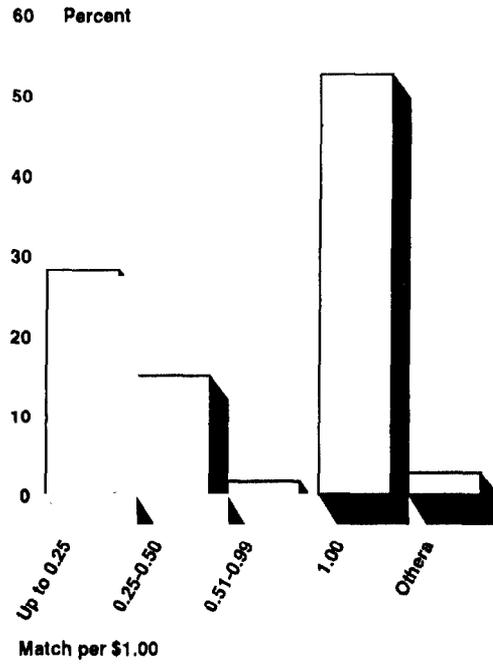
Employer Matching Contributions

As we reported in table 3.1, 51 percent of firms sponsoring 401(k) plans make contributions to match employee contributions. Typically, firms compute their matching contribution as a percentage of the employee's contribution. As can be seen in figure 3.4, a majority of plans that match employee contributions (52 percent) do so on a dollar-for-dollar basis.

However, the results shown in the figure largely reflect the influence of the smallest firms. Among companies with less than 50 employees, 69 percent of those matching at all provide dollar-for-dollar matching, whereas among all other firms, only 24 percent match at this level. For firms with 50 or more employees, the majority (64 percent) match employee contributions at 50 cents or less per dollar. Thus, while most plans that provide matching contributions do match dollar-for-dollar, most participants would have their contributions matched at a lower level, typically 50 cents or less. Obviously, then, actual matching levels offer less of an incentive to participate than might be suggested by the data presented in the figure.

Section 3
Contributions to 401(k) Plans

Figure 3.4: Level of Employer Match Per \$1 of Employee Contribution in 1986



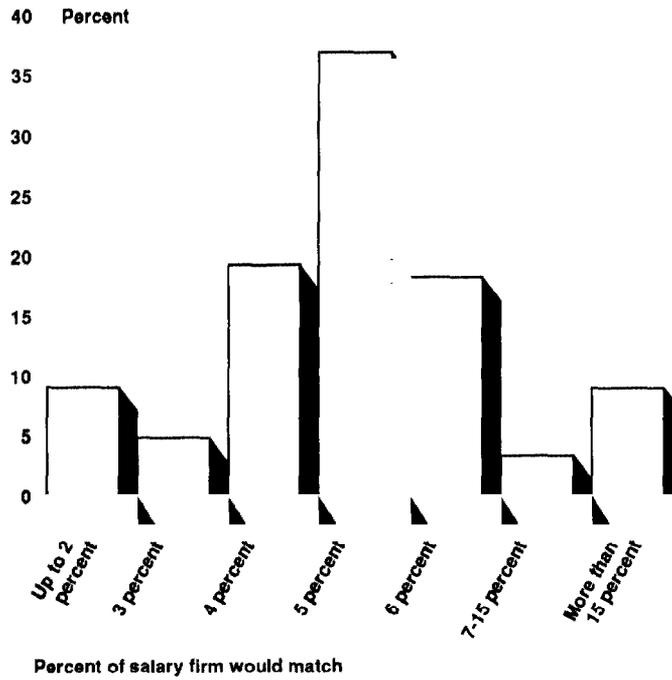
a Includes 0.1 percent with more than 1.00 match

Virtually all firms limit matching contributions to some percentage of salary. That is, contributions made up to some percent of salary are matched; contributions by an employee beyond this percentage are not matched. The most common such limits, as shown in figure 3.5, were in the range of 4 percent to 6 percent of salary. About 74 percent of firms established limits in this range for matching contributions.

However, there were some differences among firms by size on this dimension. Specifically, almost no firm with 50 to 99 employees used the 4 to 6 percent maximum. But half of these firms established maximum limits for matching contributions in the range of 15 to 25 percent of salary. It may be that these firms tend to match larger contributions because they tend to provide a fairly low matching percentage. Among this group, 62 percent match at 25 cents or less per dollar, whereas only 25 percent of all other firms making matching contributions use a rate this low. Thus, the willingness of this group of companies to match relatively large contributions is offset by the relatively low matching formula many of them use.

Section 3
Contributions to 401(k) Plans

Figure 3.5: Maximum Percentage of Salary Contributed to 401(k) Plan That Sponsoring Firm Would Match in 1986



Amounts Contributed to 401(k) Plans

Contributions to 401(k) plans represented by our respondents amounted to almost \$9 billion for the plan year ending in 1986. As shown in table 3.2, employees contributed a total of \$6.4 billion dollars during the plan year. Of that amount, \$5.1 billion (79 percent) was contributed on a before-tax basis. Employers matched those elective contributions with \$2.0 billion and also provided \$513 million to match employee after-tax contributions. The \$2.5 billion in employer matching contributions amounted to 38 cents for each dollar contributed by employees.

Overall, employee contributions averaged about \$2,005 for each employee actually contributing in 1986. Employer matching contributions added an average of about \$767 per contributing employee, for a total of almost \$2,800 per active participant. The average employee contribution was thus about the same as the maximum of \$2,000 that employees could have contributed to an individual retirement account (IRA) on a tax-deferred basis in 1986, but the average including employer matching contributions was more than 39 percent higher than that limit. Of course, some employees may have contributed to both types of plans.

Section 3
Contributions to 401(k) Plans

Table 3.2: Total Employee and Matching Employer Contributions in 1986

Dollars in millions

Source	Before-tax (elective)	After-tax (voluntary)	Total
Employee	\$5,092	\$1,353	\$6,445
Employer match	1,954	513	2,467
Total	7,046	1,866	8,912

Assets and Investment Options

In this section, we continue our analysis of the second question dealing with plan provisions and experiences. Specifically, we report on the assets in 401(k) participants' accounts, the investment options available to participants, and the distribution of plan assets among those options. Again, we relate these to firm size where appropriate.

Assets in Plan Accounts

As of 1986, there was a total of \$70.4 billion in assets held in the accounts of 401(k) plan participants represented by our respondents. This amounted to an average of about \$13,500 per eligible employee, or \$21,900 for each employee actually contributing in 1986. If we assume that eligible employees who did contribute in 1986 generally constitute the universe of active contributors, then the estimate of \$21,900 may be taken to represent the holdings of the average active contributor in 401(k) plans as of 1986.

Investment Options Available to Participants

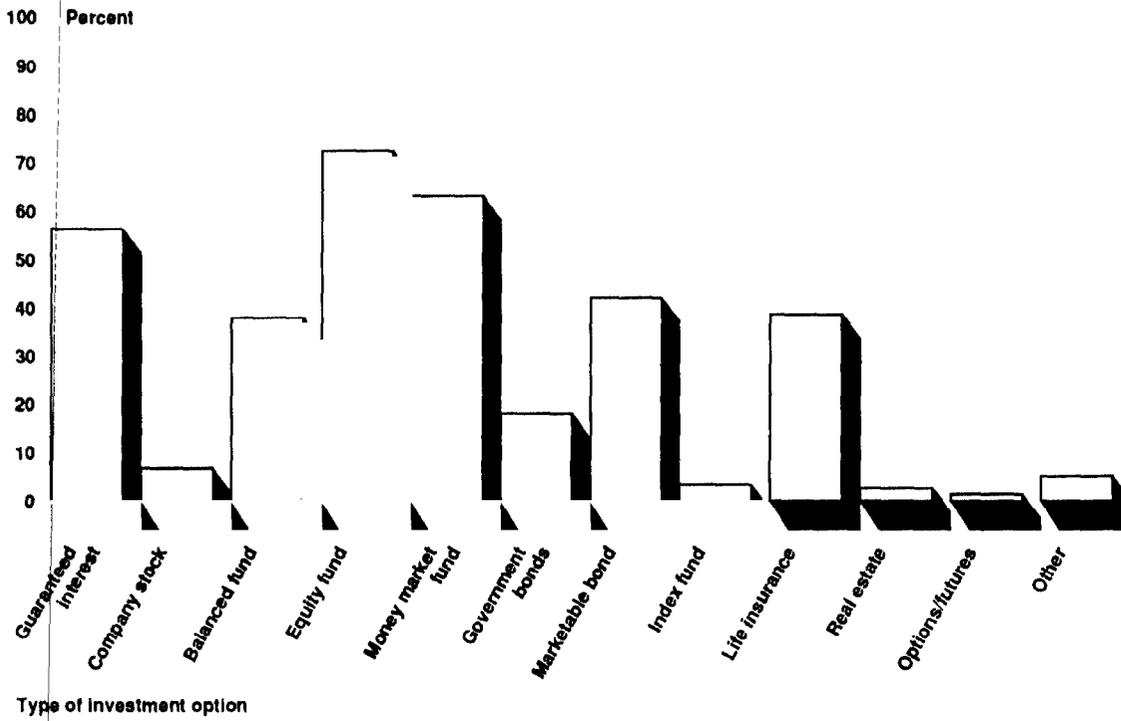
Many 401(k) plans permit employees to determine how the assets in their individual accounts are invested. Typically, participants are offered a number of options and may choose to direct some of the funds contributed on their behalf to one or more of those options. We found that only 43 percent of 401(k) plans permit participants to make such choices. However, these plans held about 95 percent of the total assets in 401(k) plan accounts (or \$55.4 billion), reflecting the fact that plans sponsored by large companies generally permit employees to make investment options.

Figure 4.1 shows the percent of plans providing each of a number of specific options among those plans that allow participants to direct account investments. The most commonly available option is a nonindexed equity fund (offered by 72 percent), followed closely by money market funds (63 percent) and guaranteed interest contracts (56 percent). Other frequently offered options are marketable bonds (42 percent), life insurance (39 percent), and balanced fund accounts (38 percent).

Most of the options in this list may be regarded as conservative investments; that is, as relatively safe, although some may be vulnerable to inflation. By contrast, some of the more risky investment options—such as stock options, commodity futures, and real estate—are offered by almost no plan sponsors. The most obvious exception is the prevalence of equity funds. As we see below, however, less is invested in such accounts than is suggested by their broad availability.

Section 4
Assets and Investment Options

Figure 4.1: Investment Options Offered 401(k) Plan Participants in 1986



Distribution of Assets Among Investment Options

The types of investment options offered and the choices made by participants may be evidence of the extent to which 401(k) plans are being used to meet the goal of providing for retirement savings rather than as tax shelters for ordinary savings or investments. In figure 4.1, we found that the options offered tended to be relatively conservative.

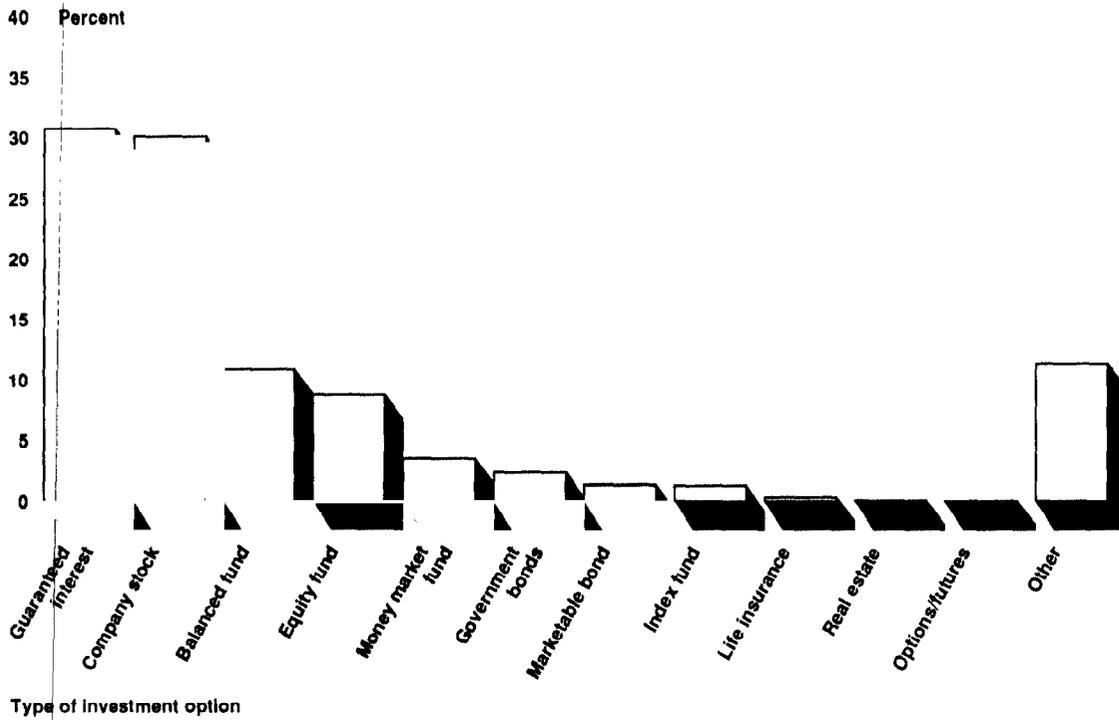
This relatively conservative approach to investment options also is apparent when we consider the actual distribution of plan assets as directed by participants. As shown in figure 4.2, in 1986, 31 percent of the assets in these plans were invested in guaranteed interest contracts, and another 11 percent in balanced funds, accounting for over two-fifths of total assets. By contrast, only 9 percent of the assets were invested in equity funds, and negligible amounts in such risky investments as stock options, commodity futures, and real estate.

However, two countervailing points also emerge from the figure. First, about 30 percent of assets were invested in stock of the sponsoring company. Such a relatively high concentration of assets in company stock is potentially risky for plan beneficiaries because, absent more diversified holdings, fluctuations in the value of the firm's stock (for whatever reasons) could have a large effect on the value of the plan's holdings. The relatively high percentage of funds invested in stock of the sponsoring company apparently reflects the historic connection noted in section 1 between 401(k) and profit-sharing plans, which often allocate stock as part of their contributions. Only 7 percent of 401(k) plan sponsors offering investment options included company stock as a choice, but company contributions may be in the form of company stock or cash used to purchase such stock.

Second, some relatively safe investment options apparently were not exercised in proportion to their availability. This appears to be the case for money market funds, marketable bonds, and life insurance. It may be that this reflects the low interest rates in 1986, which would make these instruments relatively unattractive savings vehicles.

Section 4
Assets and Investment Options

Figure 4.2: Percent of Plan Assets by Type of Investment Option for Plans Permitting Participants to Choose Options in 1986

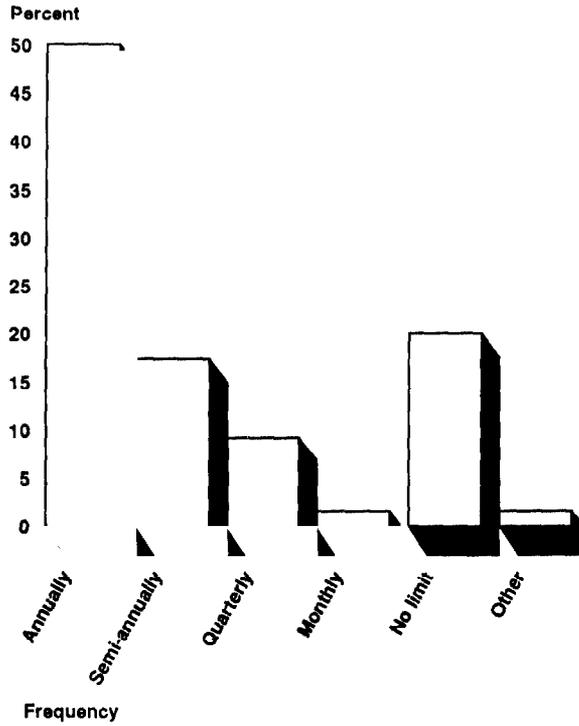


Changing Investment Options

As with the percentage of their salaries they are willing to save, plan participants may want to have flexibility in changing the mix of investments supported by their contributions. Given the volatility of equity markets, interest rates, real estate values, and so on, participants are unlikely to be attracted to savings vehicles that lock them in to choices for long periods of time. However, employers would have an interest in minimizing changes in order to avoid excessive paperwork and the burden of acting, in effect, as investment brokers.

Again, these conflicting pressures have resulted in a wide variety of solutions. The data in figure 4.3 indicate that about 20 percent of plans that permit participants to direct investment decisions on their accounts also place no limits on how frequently those options can be changed. But 50 percent permit changes only on an annual basis, and 17 percent semi-annually. These data suggest limitations on the flexibility of 401(k) plans as investment instruments.

Figure 4.3: Frequency With Which Participants Could Change Investment Options in 1986



Loans, Withdrawals, and Distributions From Plan Accounts

In this section, we complete our analysis of the second question on plan provisions and experiences by examining payouts from 401(k) plan accounts. Generally, distributions from 401(k) plans are permitted at retirement, death, disability, termination, or on reaching age 59-1/2. In addition, many plans permit participants to borrow against the assets in their individual accounts or to withdraw their funds early in cases of economic hardship. Here we review data on the incidence and use of loan and hardship provisions and on overall distributions from 401(k) plans.

Loan Provisions

Many 401(k) plans permit participants to borrow against the funds in their accounts. These provisions are allowed by law, but are controversial. On the one hand, the ability to borrow from these funds provides a degree of flexibility that should act as an incentive for employees to participate in the plans. As with other kinds of savings instruments, such as passbook savings accounts, participants are able to use their savings to meet unexpected contingencies.

On the other hand, permitting participants to borrow from the plans works against the policy objective of encouraging private savings for retirement. Indeed, loan provisions offer participants the opportunity to take advantage of the tax incentives for deferring current income while at the same time continuing to have relatively easy access to that income. Plans generally charge interest on these loans, with rates ranging up to 15 percent in 1986. Prior to 1987, such interest payments were fully deductible for income tax purposes, but the Tax Reform Act phases out this deduction (along with those for other loans).

Overall, about 83 percent of all 401(k) plans permit participants to borrow from their accounts, but this is closely associated with firm size, as shown in table 5.1. Most firms with fewer than 5,000 employees permit participants to borrow from their 401(k) accounts, but only 46 percent of those with 5,000 or more do so. As a result, only 44 percent of all 401(k) plan contributors were in plans that permitted loans in 1986.

**Section 5
Loans, Withdrawals, and Distributions From
Plan Accounts**

Table 5.1: Percent of Plans With Provisions for Loans and Hardship Withdrawals, by Firm Size, in 1986

Provision	Number of employees					Total
	5-49	50-99	100-499	500 to 4,999	5,000 or more	
Permit loans	98%	75%	57%	80%	46%	83%
Permit hardship withdrawals of						
Elective contributions	98	83	88	94	90	93
Matching contributions	63	58	51	22	61	55

Among plan participants, over 168,000 had loans outstanding as of 1986. These participants were only 5 percent of all 1986 401(k) plan contributors and 12 percent of the contributors in plans that allowed loans. The loans amounted to \$761 million, or about \$4,500 for each borrower, and accounted for 1 percent of all plan assets.

On balance, the loan provisions do not seem to pose a major obstacle to accomplishing the policy objective of encouraging private savings for retirement. Few participants actually have loans outstanding, and outstanding loan balances constitute a trivial proportion of all assets in 401(k) plan accounts.

Hardship Withdrawals

Other plan provisions designed to make 401(k) plans flexible as savings vehicles are those that permit participants to withdraw funds to meet financial hardships. As with the loan provisions, the argument in favor of permitting hardship withdrawals before retirement, death, disability, termination, or age 59-1/2 is that it encourages employees to participate by assuring them that their deferred income will be available for use in case of unforeseen contingencies. The ability to withdraw funds early works against the objective of providing individual retirement savings. Moreover, prior to the Tax Reform Act of 1986, some plans may have defined hardship so broadly as to permit withdrawals for virtually any reason.

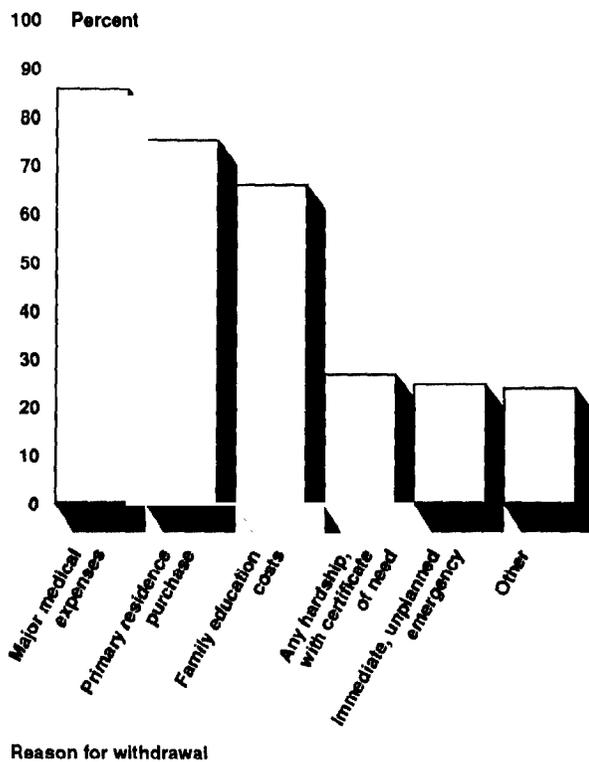
As table 5.1 shows, in 1986 nearly all plans allowed employees to withdraw funds they contributed through elective contributions. In addition, a majority of firms also permitted withdrawal of funds contributed by the firm on behalf of the participant.

About 77,000 401(k) plan participants made hardship withdrawals amounting to \$199 million in 1986. This represented less than 0.3 percent of all assets in 401(k) plan accounts. As with loans, hardship withdrawals do not appear to pose an immediate threat to the viability of 401(k) plans as retirement savings plans.

Figure 5.1 shows the reasons for hardship withdrawals permitted by plans providing for early withdrawals in 1986. Most plans allowed withdrawals for the purposes of meeting major medical expenses, purchasing a primary residence, or financing family education. However, some plans permitted withdrawals for any "hardship" certified as such by the participant (27 percent of plans), immediate, unplanned financial needs (25 percent), or other reasons (24 percent). Presumably the vagueness of these categories raises concerns among critics of 401(k) plans about possible abuses.

Section 5
Loans, Withdrawals, and Distributions From
Plan Accounts

Figure 5.1: Permissible Reasons for
Hardship Withdrawals in 1986



Distributions From 401(k) Plans

In plan year 1986, nearly \$8 billion was distributed to 808,000 participants from 401(k) plan accounts, exclusive of loans. This amounted to about \$9,600 per participant receiving a distribution, and these participants equaled 25 percent of all contributors in 1986. As table 5.2 shows, 86 percent of the participants claiming distributions were covered by plans sponsored by firms with 5,000 or more employees; the distributions made to these individuals amounted to nearly 82 percent of all 401(k) plan distributions for the year.

In general, not only did the number and amount of distributions increase with firm size (as would be expected), but also the average amount of the distribution. For the smallest firms, with fewer than 50 employees, distributions averaged less than \$1,400 each, increasing to \$4,600 for firms with 100-499 employees, and to \$9,200 for those with over 5,000. By far the largest average amounts, almost \$29,000, were for firms with 500-4,999 employees. This unusually high figure appears to be a statistical artifact arising from the influence of a few cases in this group, which is smaller than the other groups in the table.

These distributions may appear to be rather small for purposes of retirement. In fact, they include distributions for other reasons, such as termination and hardship withdrawals. Unfortunately, nearly half of our respondents were not able to provide information on the numbers and amounts of distributions for specific reasons. Moreover, the amount distributed to a retiree in any year could be fairly small if the individual received distributions as an annuity rather than a lump sum. Thus, the data do not permit us to make any reliable estimates of the cash value of the retirement benefits derived from 401(k) plans in 1986.

**Section 5
Loans, Withdrawals, and Distributions From
Plan Accounts**

**Table 5.2: Distributions From 401(k)
Plans, by Firm Size, in 1986**

Dollars in millions

Employees	Number	Average amount	Total amount
5-49	11,582	\$1,362	\$16
50-99	4,675	2,283	11
100-499	62,717	4,581	287
500-4,999	38,045	28,921	1,100
5,000 or more	691,462	9,187	6,352
Total	808,481	9,609	7,766

Equity Issues and Plan Participants

Our third question concerns the extent to which 401(k) plans benefit employees at various salary levels. As already noted, one of the major criticisms of 401(k) plans is that they are primarily vehicles to provide tax subsidies for the savings of high-income employees. This criticism rests on the perception that the plans are more likely to be advantageous to higher paid employees and that the rate of savings generally increases with income. In addition, minimum age and service requirements and long vesting schedules may work against the interests of younger and more mobile employees, who may not attain eligibility or full vesting. In general, however, these criticisms have been assertions of logic rather than depictions of actuality. In this section, we examine these issues.

Eligibility and Participation in 401(k) Plans

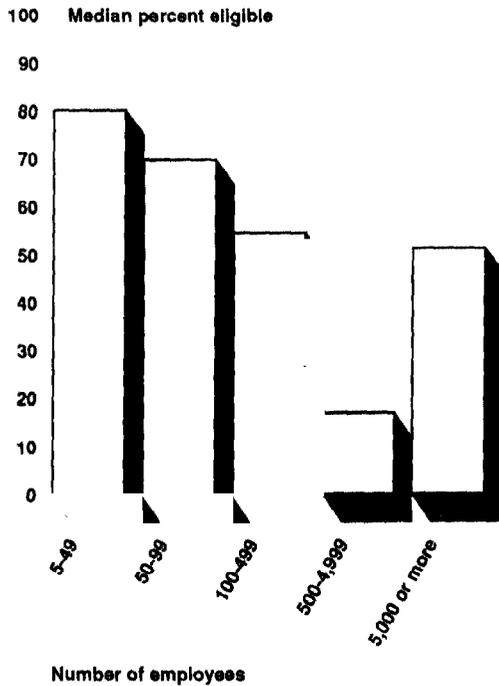
To ensure that a broad cross-section of employees is offered the opportunity to participate in company-sponsored retirement plans, the Internal Revenue Code establishes minimum coverage requirements. A plan can exclude employees from eligibility for a variety of reasons, including minimum age or service requirements, membership in a union where retirement plans have been the subject of collective bargaining, or other reasons. However, such exclusions may not discriminate in favor of officers, stockholders, or highly compensated employees.

The median percentage of employees eligible to participate in the plans we surveyed was 75 percent for 1986. However, the percentage of all employees in sponsoring firms that were eligible to participate in the 401(k) plans was lower than the median eligibility rate. Among the 9.9 million people employed by firms that sponsored 401(k) plans represented by our sample, only 5.2 million (53 percent) were eligible to participate in the plans in 1986.¹ About 3.2 million of these (62 percent of those eligible and 32 percent of all employees in sponsoring firms) actually made contributions that year.

The discrepancy between the median percent of employees eligible (75 percent) and the percentage of all employees eligible (53 percent) results

¹Our figures approximate those reported by the Bureau of Labor Statistics (U.S. Department of Labor, *BLS Reports on Employee Benefits in Medium and Large Firms in 1986*, March 31, 1987). BLS surveyed employees in firms with 100 or more employees, a sample representing 21.3 million workers. They found that 31 percent, or 6.6 million, were covered by some form of thrift-savings plan, including 401(k) plans. Combining data from our respondents and estimates for firms representing non-respondents provides an estimate of 8.7 million workers eligible for 401(k) plans in 1986. These figures are similar, given the somewhat broader definition of plans used by BLS, the limitation of their sample to employees in larger firms, and the different sampling frames used (workers for BLS, firms for our study).

Figure 6.1: Median Percent of Employees Eligible to Participate in 401(k) Plans, by Firm Size, in 1986



from the fact that large firms, which accounted for the great majority of workers employed by 401(k) plan-sponsoring firms, had lower average participation rates than did smaller firms. Sponsoring firms represented by our respondents with 5,000 or more employees employed over 7.1 million workers, of whom 3.5 million (49 percent) were eligible for participation in 401(k) plans. Of these, 2.0 million (57 percent of those eligible and 28 percent of all employees in these firms) actively contributed to the plans in 1986. (See figure 6.1.)

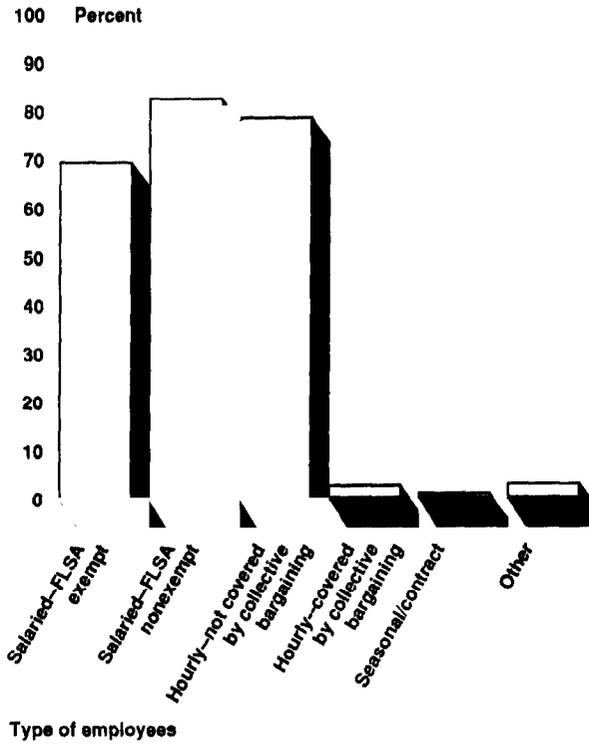
Types of Employees Covered by 401(k) Plans

Figure 6.2 shows that most 401(k) plans covered salaried employees and hourly employees not covered by a collective bargaining agreement. In fact, if we consider only those firms having employees in each of these categories, virtually every plan included those employees.

By contrast, hourly employees covered by collective bargaining agreements were eligible to participate in only about 2 percent of all 401(k) plans. Again, if we restrict our attention to firms that had such employees, we find in only 7 percent were they eligible to participate. (Only 33 percent of sponsoring firms had hourly employees covered by collective bargaining agreements.) This may reflect a decision on the part of union negotiators to forgo the possible benefits of 401(k) plans for other benefits, such as defined benefit pension plans. Almost no plans covered seasonal or contract employees, even where firms had such employees.

Section 6
Equity Issues and Plan Participants

Figure 6.2: Types of Employees Eligible to Participate in 401(k) Plans in 1986



Minimum Age and Service Requirements

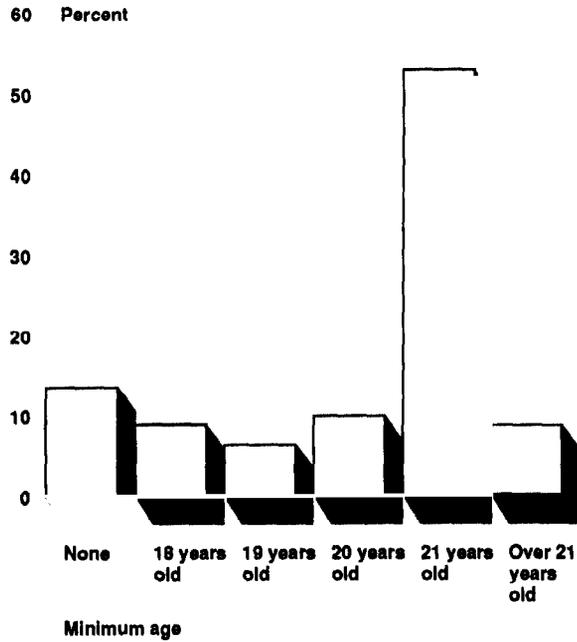
Retirement plans may require that employees be a minimum age or serve for a minimum period of time or both before they are eligible to participate in the plans. In 1986, a plan could meet the qualification requirements of section 401 of the Internal Revenue Code even if it set a minimum age for eligibility as high as 21 years, and if it required as much as 3 years of service (only 1 year if contributions were not immediately vested). If a plan adopted these requirements it would tend to exclude younger, more mobile workers and those who might move into and out of the work force relatively frequently.

In fact, the plans we surveyed generally did impose minimum age requirements. As figure 6.3 shows, only 14 percent of the plans had no minimum age requirement, while 53 percent imposed the allowable requirement of 21. (About 9 percent of plans indicated higher requirements. Some respondents may not have been aware of recent changes, provided for in the Retirement Equity Act of 1984, limiting the requirement to age 21.)

All but 3 percent of the plans did require some minimum period of service for employees to become eligible for participation in the 401(k) plan. Most of these (62 percent) had a 12 month requirement; an additional 34 percent had shorter periods. Only 2 percent of 401(k) plans required more than 12 months of service for participation.

Section 6
Equity Issues and Plan Participants

Figure 6.3: Minimum Age Requirements
for 401(k) Plan Eligibility in 1986



Vesting in Plan Assets

As with other retirement plans, 401(k) plans are subject to vesting schedules. This refers to the amount of time it takes for employees to gain legal title to all or some of the assets in the plan or the benefits to be derived therefrom. The amounts contributed by employees into the 401(k) plan and earnings on those amounts are immediately vested; that is, participants can claim distributions from those funds whenever they meet the criteria for distribution. But employer contributions and earnings on those amounts may not be subject to immediate vesting. Ordinarily, employees gain the benefits from those funds only when they meet certain time requirements. This is the case for most retirement plans.

There are four major types of vesting schedules. With immediate vesting, the participant is 100-percent vested in the funds in his or her account as soon as they are deposited. With a graded schedule the participant is vested in a progressively higher percentage of the assets each year until reaching 100-percent vesting (for example, 25 percent after 5 years, 40 percent after 8 years, and so on, to 100 percent after 15 years). A cliff schedule is one in which the participant is vested in none of the assets up to a certain year, then is 100-percent vested (for example, 0-percent vested through 10 years, 100-percent vested after 10). Class year vesting is applied to the annual contribution, so that a participant is vested with an increasing proportion of each year's contribution over time.

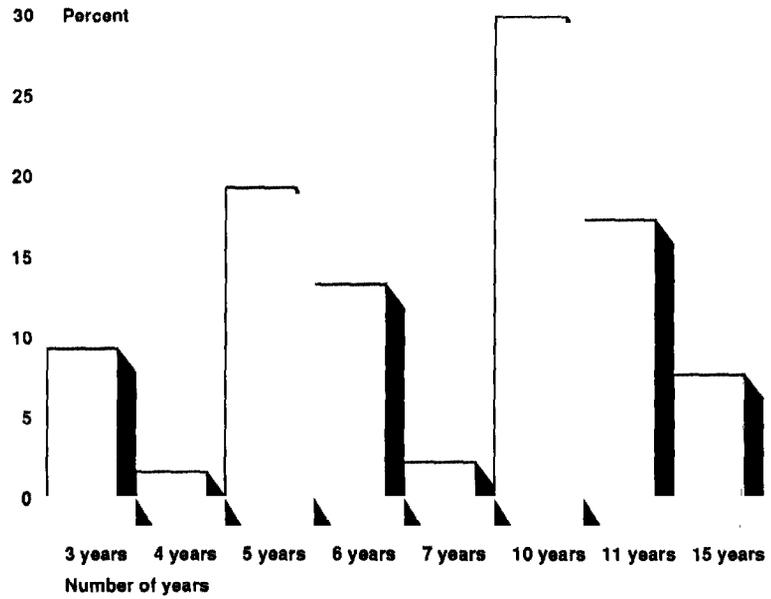
Among the 401(k) plans we studied, only about 17 percent provided immediate vesting. Most used either graded (71 percent) or cliff (9 percent) schedules; 1 percent said they used class year vesting. About 1 percent indicated they had some other type of vesting schedule.

The maximum number of years required to reach full vesting is governed by law and varies with the type of vesting schedule. For most purposes, in 1986 the legal limit for full vesting was 10 to 15 years. In figure 6.4, we see that nearly half (47 percent) of the plans we studied, excluding those with immediate vesting, required 10 or 11 years for participants to become fully vested.

One of the advantages of 401(k) plans for younger and more mobile workers is that the main source of contributions (elective employee contributions) is subject to immediate vesting. Thus, the vesting schedules reported here apply only to employer contributions and earnings on those contributions.

Section 6
Equity Issues and Plan Participants

Figure 6.4: Number of Years to Full Vesting in 1986



Excludes a total of less than 0.3 percent of cases with other periods to full vesting

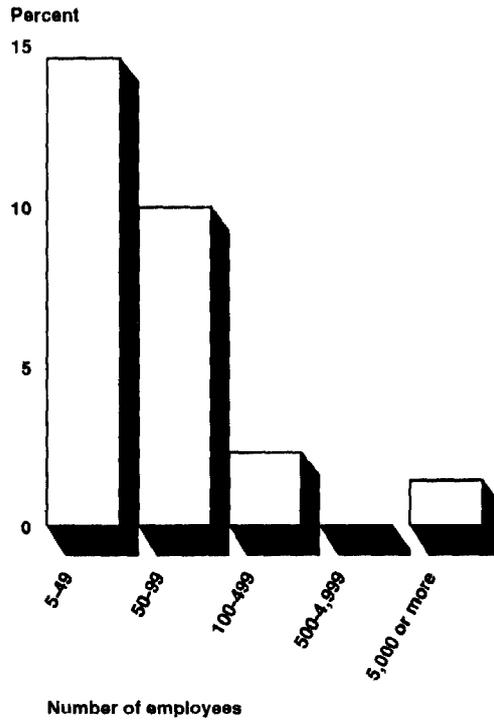
Integration With Social Security

One type of plan feature that could affect the distribution of 401(k) plan benefits between higher and lower paid workers is the integration of plans with Social Security. Integration permits employers to use different matching contribution rates based on that portion of an employee's wage and salary earnings that exceeds the Social Security taxable earnings base—\$42,000 in 1986. For example, an employer could contribute nothing based on earnings up to the base, but 4 percent for earnings above the base. This benefit thus favored employees with earnings at least as high as this base. Under the terms of the Tax Reform Act of 1986, beginning in 1987 firms may make contributions for participants above the base only if they make equal percentage contributions on behalf of employees whose earnings do not exceed the Social Security base.

Overall, only 9 percent of 401(k) plans were integrated in 1986, but as shown in figure 6.5, this varies somewhat by firm size. Smaller firms, those with fewer than 100 employees, were more likely to have integrated plans than were larger firms. According to our respondents, virtually all plans that were integrated prior to tax reform will continue to be, and no plans not integrated in 1986 intend to adopt integration.

Section 6
Equity Issues and Plan Participants

Figure 6.5: Integration of 401(k) Plan Benefits With Social Security, by Number of Employees, in 1986



Salary Breakpoints Under the ADP Test

In order to ensure that benefits are not concentrated excessively among higher paid employees, the tax code establishes nondiscrimination rules for 401(k) plans, in addition to coverage requirements. To comply with these rules a plan must meet the average deferral percentage (ADP) test.

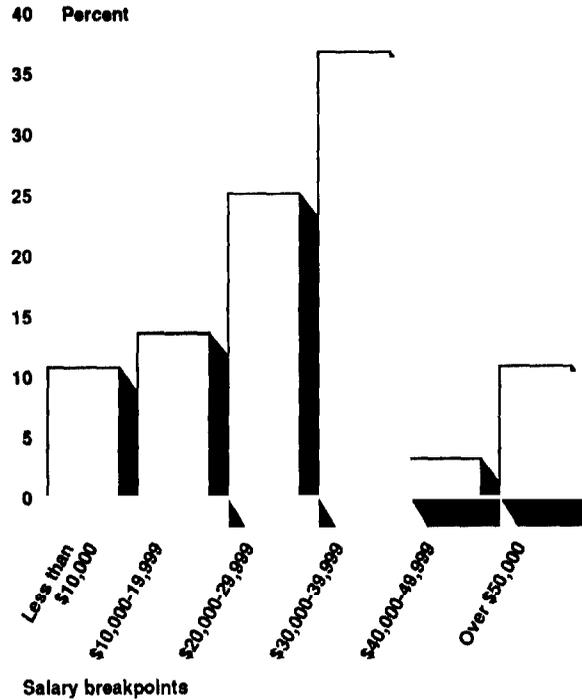
The ADP test involves a comparison of the percentage of annual salary and wages taken as deferred compensation by higher paid and lower paid employees eligible to participate. In 1986, a plan would meet the test if either of the following were true: (1) if the ADP for the higher paid one-third did not exceed 1.5 times the ADP for the lower paid two-thirds of eligible employees; or (2) if the difference between the ADP for the higher paid one-third group and the lower paid two-thirds did not exceed 3 percentage points, and the higher paid ADP did not exceed 2.5 times that of the lower paid group. (These tests were changed in the Tax Reform Act of 1986, as discussed in section 8.)

The crucial element in applying this test is to establish the salary breakpoint that divides participants into the higher and lower paid groups. In figure 6.6, we show the distribution of salary breakpoints for the one-third, two-thirds test as reported by our respondents. The largest group of plans had breakpoints of \$30,000-\$39,999, and the next largest, \$20,000-\$29,999. Combined, these two groups accounted for 62 percent of all respondents. The median breakpoint was \$30,000. This means that in half the plans, the higher paid one-third of eligible employees earned salaries and wages of at least \$30,000.

Our data do not permit us to calculate the percentage of eligible or actual participants at each salary level. However, information prepared by the Employee Benefit Research Institute for the Department of Health and Human Services, Current Population Survey, Pension Supplement, indicate that, in 1983, almost 34 percent of all contributors to 401(k) plans had earnings of \$30,000 or more.² (By comparison, only about 15 percent of all full-time civilian workers earned that amount or more in that year, according to U.S. Census Bureau estimates; 65 percent made less than \$20,000.) Moreover, most contributors with earnings of \$30,000 or more (68 percent) contributed \$1,200 or more in 1983. By contrast, a majority of contributors with earnings of \$10,000-\$29,999 (53 percent) contributed less than \$1,200.

²Employee Benefit Research Institute, "After Tax Reform: Revisiting 401(k)s," Washington, D.C., November, 1987, pp. 8-9.

Figure 6.6: Salary Breakpoints for the One-Third, Two-Thirds ADP Test in 1986



According to our respondents, participants deferred an average of 4.7 percent of salary through contributions to 401(k) plans. The average for the higher paid group was 5.4 percent; that for the lower paid group, about 3.8 percent. The average excess ADP for the higher paid over the lower paid group on a plan-by-plan basis was 1.6 percentage points, but there was a broad range. At one extreme, the higher paid group had an ADP 8 percentage points above that of the lower paid group; at the other, the higher paid group had an ADP 5 percentage points lower.

Overall, these results suggest that higher paid employees derive somewhat more in benefits from 401(k) plans than do lower paid employees. The distribution of incomes among eligible employees seems somewhat higher than is true in the general population, indicating that higher paid workers are more likely to be eligible for such plans than are lower paid workers. In addition, higher paid participants contribute more (and thus defer more in taxes) than do lower paid participants. (However, this analysis does not take account of other plans, so we cannot assess the overall distribution of benefits from all of a company's plans.)

Overall Assessment

The findings reported above permit an overall assessment of 401(k) plans. This assessment centers on three main issues: (1) the availability of 401(k) plans, (2) the extent to which plan designs and experiences relate to the fundamental tension between the policy of encouraging retirement savings and participants' possible interest in access to savings for more immediate needs, and (3) the distribution of benefits among workers at different salary levels.

First, we found that few firms sponsored 401(k) plans in 1986, especially among small companies. Of the firms represented by our respondents, only about 4 percent, employing a total of 9.9 million workers, sponsored 401(k) plans that year. Despite hopes that these plans would prove attractive to small companies, in fact, few such firms sponsored 401(k) plans in 1986. By contrast, virtually all firms with 5,000 or more employees sponsored such plans that year.

Among the firms that did sponsor the plans, only about half of all employees, 5.2 million, were eligible to participate. However, this may reflect, in part, collective bargaining agreements, especially in large firms, through which many workers may not have agreed to participate in 401(k) plans. Often, unions prefer to have employers direct contributions to defined benefit pension plans for their members. Among smaller companies a higher percentage of employees was eligible to participate.

Even though few firms offered 401(k) plans in 1986, among those that did, 62 percent of eligible employees were active contributors. In 1986, these employees contributed \$6.4 billion into their plan accounts, with employers providing matching contributions of \$513 million. The average total contribution on behalf of these participants was nearly \$2,800 for the year.

Second, 401(k) plans seem to have succeeded in combining retirement savings incentives with flexibility goals for most participants. Most plans provided opportunities for participants to borrow from their plan accounts or to withdraw their accumulated funds entirely in cases of financial hardship. These provisions permit flexibility, so that resources are available to participants to meet financial contingencies. Nevertheless, in 1986, outstanding loan balances amounted to only 1 percent of total 401(k) plan assets, and only 0.3 percent of plan assets were taken as hardship withdrawals. This suggests that the plans are being utilized for long-term, retirement savings by participants.

Similarly, the investment strategies of plan participants were apparently conservative. Most plans did not permit participants to direct investments of the funds in their individual accounts. But the 43 percent of plans that did allow participants to select investment options accounted for 95 percent of total 401(k) plan assets. Over 40 percent of these assets were invested in guaranteed interest accounts and balanced funds.

Finally, we found some evidence that the benefits of 401(k) plans are somewhat more concentrated among higher paid than lower paid workers. About 34 percent of active 401(k) plan contributors had salaries of \$30,000 or more in 1983, according to one study, compared with only about 15 percent of all full-time civilian workers. Moreover, those contributors making more than \$30,000 were much more likely to make large contributions than were lower paid participants and, thus, also were able to defer more in taxes.

However, none of the evidence we have examined suggests that 401(k) plans are largely designed to provide tax subsidies for the savings and investment activities of the highly compensated. Within sponsoring firms, most types of employees are covered, and many plans do not impose the highest age and service requirements or vesting schedules permitted by law. The combination of coverage requirements and non-discrimination rules places limits on the extent to which higher paid employees can derive more in benefits from these plans than do lower paid employees in the same firms. Changes resulting from the Tax Reform Act of 1986 are designed to tighten these limits.

Tax Reform and 401(k) Plans

In this section, we answer the fourth and final question on the possible effects of the Tax Reform Act of 1986 on 401(k) plans. We asked our respondents to assess how some of the major changes in retirement plan provisions embodied in the Tax Reform Act would affect their own 401(k) plans. Because our data were collected before a full year of tax reform implementation, we can report what a nationally representative sample of employers anticipated the effects of tax reform would be; data on actual effects were not available at the time of our review. We did conduct some analyses by retroactively applying changes in the tax code to plan data for 1986, to examine what effects were likely.

For each of several major provisions of the Tax Reform Act affecting 401(k) plans, we asked participants to indicate whether that change would likely increase, decrease, or have no effect on employee participation in the plan, employee contributions, and employer contributions at their firm. (Respondents also could indicate if they had no basis to make a judgment on these issues.)

The \$7,000 Limit on Contributions

One of the seemingly most dramatic changes made in these plans was that of reducing the total amount of tax-deferred elective contributions to \$7,000 for all 401(k) plans in which the employee participates. This cap is indexed to inflation for 1988 and subsequent years. As we indicated earlier, antidiscrimination rules may result in few participants being able to contribute up to these limits, even if they wish to do so.

For the most part, respondents did not think this provision would affect participation or contributions for lower paid workers, who would in any case be less likely to make large contributions than higher paid workers. (See table 8.1) But about a third thought that there would be less participation among the higher paid, and half indicated that contributions from this group would decrease as a result of the change.

Table 8.1: Expected Effects of the \$7,000 Contribution Limit on Employee Participation, and Employee and Employer Contributions

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	1%	62%	34%	3%
Lower paid group	8	88	1	4
Employee contributions				
Higher paid group	0	46	50	4
Lower paid group	7	82	1	10
Employer contributions				
Higher paid group	1	62	28	10
Lower paid group	7	68	15	9

In fact, we found that in 1986 there were only about 57,000 contributions exceeding \$7,000 each (representing only 2 percent of active contributors). The total amount contributed in excess of the new limit was \$161.6 million (3 percent of before-tax contributions by participants), amounting to about \$2,800 for each such contributor. This amount, combined with the \$7,000 excluded from the calculation, means that the average total contribution for this group was \$9,800, far less than the \$30,000 maximum allowed in 1986. Thus, this provision is likely to affect few participants, and many of those affected will not likely be greatly affected.

Greater Restrictions on Early Withdrawals

The Tax Reform Act also placed restrictions on early withdrawals from 401(k) plans organized as part of profit sharing or stock bonus plans. Beginning in 1989, withdrawals can be made only for the amounts representing the participant's elective contributions through salary reduction. Participants will not be allowed to withdraw employer contributions, employee after-tax voluntary contributions, or the earnings on plan accounts.

Among our respondents (see table 8.2), 35 percent indicated that this provision would decrease the participation of lower paid employees, and 46 percent said it would reduce the amounts those employees would contribute. Smaller proportions also foresaw similar effects among the higher paid. These results reflect the tension we have noted earlier between the retirement savings and flexibility aspects of 401(k) plans. Lower paid employees in particular might be reluctant to defer income through savings plans if it were difficult to gain access to that money in an emergency, even though, as we reported above, relatively few participants actually took advantage of these provisions in 1986.

**Section 8
Tax Reform and 401(k) Plans**

**Table 8.2: Expected Effects of
Withdrawal Restrictions on Employee
Participation, and Employee and
Employer Contributions**

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	0%	46%	29%	25%
Lower paid group	0	41	35	24
Employee contributions				
Higher paid group	0	31	42	28
Lower paid group	0	27	46	27
Employer contributions				
Higher paid group	0	73	9	18
Lower paid group	0	73	10	17

Excise Tax on Early Withdrawals

In addition to restricting the availability of funds for withdrawals, the Tax Reform Act also imposes a 10 percent excise tax on most early withdrawals. This tax is in addition to any personal income taxes that would be owed on the amounts withdrawn. The tax does not apply to hardship withdrawals used to cover uninsured medical costs in excess of 7.5 percent of the participant's adjusted gross income.

Pluralities of our respondents (see table 8.3) indicated that this tax would reduce participation (48 percent) and contributions (46 percent) among the lower paid employees. Significant percentages also said that there would be decreases in participation and contributions among the higher paid group. This again reflects the retirement, versus ordinary, savings conflict we noted earlier. As we reported, however, only 0.3 percent of the assets in 401(k) plan accounts were withdrawn for hardship reasons in 1986.

**Section 8
Tax Reform and 401(k) Plans**

Table 8.3: Expected Effects of the 10-Percent Excise Tax on Employee Participation, and Employee and Employer Contributions

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	0%	31%	42%	26%
Lower paid group	0	26	48	26
Employee contributions				
Higher paid group	0	37	35	28
Lower paid group	0	27	46	27
Employer contributions				
Higher paid group	0	72	9	18
Lower paid group	0	72	10	17

Excise Tax on Distributions Above \$112,500

Another provision of the Tax Reform Act imposes a 15-percent excise tax on amounts an individual receives (in total from all tax-favored plans in which he or she participates) that exceed \$112,500 in any one year. However, we do not know how many participants will be affected. (We did not obtain information on the distribution of account balances and the extent to which recipients of distributions might be able to defer or reduce taxes on distributions under provisions of the Internal Revenue Code.)

This uncertainty is reflected in the responses we received from our sample of firms (see table 8.4). Relatively high percentages of respondents indicated they had no basis to judge the effects of this provision on participation and employee contributions. Among those who did express an opinion, more thought it would decrease participation among higher paid than among lower paid employees. Almost none indicated that employer contributions would be affected by this provision.

**Section 8
Tax Reform and 401(k) Plans**

Table 8.4: Expected Effects of the 15-Percent Excise Tax on Employee Participation, and Employee and Employer Contributions

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	0%	31%	24%	45%
Lower paid group	0	40	16	44
Employee contributions				
Higher paid group	0	37	25	38
Lower paid group	0	40	24	36
Employer contributions				
Higher paid group	0	71	2	27
Lower paid group	0	73	1	26

Uniform Definition of Highly Compensated

One major protection against discrimination in plan benefits among employees is the application of coverage and nondiscrimination tests. Crucial to these tests is the definition of the highly compensated group. As we have seen, however, two individuals with the same salaries but working for different firms could be treated quite differently under the one-third, two-thirds rule applicable in 1986 and before. The employee in a firm with a relatively high salary structure could be in the lower paid group, while the other, in a firm with a relatively low salary structure, could be in the higher paid group.

The Tax Reform Act addressed this problem by establishing a more uniform definition of "higher paid" group. Under the terms of the Tax Reform Act, the higher paid group consists of participants who meet any of the following criteria:

1. employees who own more than 5 percent of the firm,
2. employees earning more than \$75,000 annually,
3. employees earning more than \$50,000 annually who are also among the highest paid 20 percent of the firm's workers, or
4. officers who earn at least 150 percent of the section 415 limits (i.e., \$45,000 in 1987).

As a practical matter, this rule likely will define most employees earning over \$50,000 as higher paid.

Not surprisingly, most of our respondents did not see any change in the behavior of lower-paid workers growing out of this provision (see table 8.5), but many did predict less participation (38 percent) and less in the way of contributions (35 percent) from the higher paid group. This may simply reflect a reduction of the size of this group in many firms as a result of the new definition.

**Section 8
Tax Reform and 401(k) Plans**

Table 8.5: Expected Effects of the Uniform Definition of "Highly Compensated" on Employee Participation and Employee and Employer Contributions

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	1%	48%	38%	13%
Lower paid group	0	87	0	13
Employee contributions				
Higher paid group	1	50	35	14
Lower paid group	0	88	1	11
Employer contributions				
Higher paid group	0	65	17	18
Lower paid group	0	75	8	17

More Restrictive ADP Test

The other change directed at promoting nondiscrimination in 401(k) plans involves the ADP test itself. Under the new rules, the ADP for the highly compensated cannot exceed the greater of

1. 125 percent of the ADP of the lower paid group, or
2. the lesser of either 200 percent of the ADP for the lower paid group or the ADP for the lower paid group plus 2 percentage points.

As we reported above, the average difference between the ADP for the higher paid and the lower paid employees on a firm-by-firm basis was about 1.6 percentage points. However, the range of values on this dimension was quite wide, and some plans had differences larger than 2 percentage points. Moreover, the overall deferral rate for highly compensated employees (5.4 percent) was, on average, 1.4 times that for the lower compensated group (3.8 percent), which is more than the 1.25 multiple allowed under the new test.

Not surprisingly, then, many respondents predicted reductions in participation (40 percent) and contributions (28 percent) among higher paid employees because of the new test. (See table 8.6.) At the same time, about three-fourths of respondents anticipated no change among the lower paid group on either participation or employee contributions.

**Section 8
Tax Reform and 401(k) Plans**

Table 8.6: Expected Effects of the More Restrictive ADP Test on Employee Participation, and Employee and Employer Contributions

Effect on	Increase	No change	Decrease	No basis to judge
Employee participation				
Higher paid group	0%	40%	40%	21%
Lower paid group	0	72	8	20
Employee contributions				
Higher paid group	0	51	28	21
Lower paid group	0	74	1	26
Employer contributions				
Higher paid group	0	64	17	19
Lower paid group	0	74	8	18

Anticipated Overall Effects of Tax Reform

Consideration of tables 8.1 through 8.6 reveals several patterns of likely response to the Tax Reform Act of 1986 among 401(k) plan sponsors and their employees. First, most respondents expect none of these changes to affect employer contributions. Second, the participation and contribution behavior of lower paid workers was generally expected to be unaffected by reform, except for the restrictions and excise taxes placed on hardship withdrawals. For these items, lower paid workers were expected to react negatively by more respondents than were higher paid employees. This makes sense because these workers are less likely than higher paid employees to be able to provide for emergencies from other sources. Finally, each provision was expected to lower the participation or contributions of higher paid employees by one-fourth to one-half of the firms responding.

Many of these changes are likely to create additional administrative burdens for plan administrators. About 68 percent of respondents indicated that there would be such an increase, and only 6 percent reported they expected no change. (The remaining 26 percent were unsure of the effects on administration; none reported an expectation of decreased burden.) Despite these negatives, overall, virtually no respondents reported that they would discontinue sponsoring their 401(k) plans.

In the end, then, it appears likely that the Tax Reform Act will result in some changes in the participation patterns and contribution levels of employees at some firms that sponsor 401(k) plans. But the plans will remain in place. We recognize, of course, that other factors may influence participation patterns in 401(k) plans. These include other aspects of the Tax Reform Act of 1986 and economic conditions more generally that may increase or decrease plan attractiveness relative to other uses of discretionary income.

Request Letter

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United States Senate
 SPECIAL COMMITTEE ON AGING
 WASHINGTON, DC 20510

May 27, 1986

Honorable Charles A. Bowsher
 Comptroller General
 U.S. General Accounting Office
 441 G Street, NW
 Washington, DC 20548

Dear Mr. Bowsher:

As Chairman of the Senate Special Committee on Aging and the Subcommittee on Savings, Pensions and Investment Policy, I am interested in information on cash or deferred arrangements (CODAs) established under section 401(k) of the Internal Revenue Code. We are pleased to learn that the Program Evaluation and Methodology Division (PEMD) of the General Accounting Office is conducting a review of 401(k) CODAs. We understand that your staff will be developing a methodology for assessing these plans as retirement vehicles, and for purposes of providing baseline data that can be used to address revenue issues.

Within these broad objectives, the Committee and Subcommittee staffs would like your staff to address the following questions:

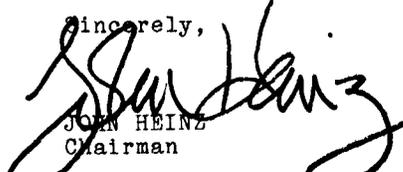
1. How many firms offer their employees 401(k) plans, and how are these plans related to other pension plans provided by those firms?
2. How do plan provisions and experiences vary across firms, especially regarding withdrawals, employer matching and investment options?
3. What are the relationships between firm characteristics, especially firm size, and plan provisions and experiences?
4. To what extent do 401(k) plans benefit employees at various salary levels, and what are the "break points" under the nondiscrimination standards applicable to these plans?

Appendix I
Request Letter

Honorable Charles A. Bowsher
May 27, 1986
Page 2

The review will address issues that need to be resolved in the near future. Therefore, it would be most useful if you could provide findings in the form of a briefing report by the fall of 1986. If you have any questions, please call Larry Atkins at 224-5364.

Sincerely,



JOHN HEINZ
Chairman

JH/lak

Sampling and Survey Information

We collected the data used in this report through a mail survey of a sample of nearly 5,000 firms. In this appendix, we describe our sampling procedures and provide information on response rates and sampling errors.

Our sample was drawn from two sources. First, at our request, the Internal Revenue Service selected 4,000 firms from the Business Master File. The sample was selected after first stratifying all corporate tax returns for tax year 1985 into two groups, based on whether the taxable income before operating losses was up to \$100,000 or more than \$100,000. Using systematic sampling, the IRS selected 2,500 firms from the lower income group and 1,500 from the higher income group. In addition to these firms, we sampled 998 firms listed on the Fortune 1,000 list published by Fortune Magazine in the spring of 1986. We then searched for and removed any duplicate selections, giving us a final sample of 4,995 corporations.

The procedures we used gave us a representative sample of the universe of all U.S. corporations. To generalize from the data provided by sample firms to that universe we calculated weights for each of our three groups of firms, the two from the IRS sample and the Fortune 1,000 sample. These factors are the inverse of the proportion of all firms in a stratum selected for our sample. The 2,500 lower income firms drawn by the IRS had a weight of 987.2444 (that is, each sample firm represented over 987 firms in this stratum listed on the BMF). The weights for the higher income BMF firms and the Fortune 1,000 firms were 90.9093 and 1.0, respectively. These weights were applied to all the results presented in this report.

The procedures we used allow us to generalize only to that portion of the universe of corporations represented by actual respondents. For some analyses, however, we have made explicit assumptions about the nonresponding firms and made estimates that apply to the full universe. In addition, based on our discussions with congressional staff on their interests, we have eliminated from all tables and graphs data on firms with fewer than five employees; in any case, virtually no firms of this size in our sample sponsored a 401(k) plan. Thus, the results reported here are generalizable to a universe of about 793,000 corporations with five or more employees, unless otherwise noted.

**Appendix II
Sampling and Survey Information**

We conducted a two-wave mail survey of the sample firms in 1987. The first wave consisted of a short questionnaire and was designed to identify those firms sponsoring 401(k) plans and to provide data on the benefit plans sponsored by the company, the total number of employees, the industry of the firm, and other information. We made followup mailings to nonrespondents on two occasions, for a total of three contacts. In addition, we searched for new addresses when questionnaires were returned as undeliverable by the Postal Service.

For the second wave, we mailed a detailed questionnaire to each of the firms that we had identified as 401(k) plan sponsors. This questionnaire was developed with the advice of professionals in the employee benefits community. The questions dealt with plan provisions, plan experiences (including financial and other statistical information), and the views of respondents on the likely effects of tax reform on the plans. Again, two followup mailings were used to minimize nonresponse, except where the first questionnaire was returned too late to make this practical.

In table II.1, we present information on the response to our surveys. The overall response rate to the first questionnaire, excluding undeliverables, was 73 percent, and to the second, 64 percent. These are fairly high rates for mail questionnaires, but leave open the possibility that nonrespondents might have been different from respondents on important dimensions.

Table II.1: Sample Strata and Survey Responses.

Information	Stratum			Total
	Income to \$100,000	Income over \$100,000	Fortune 1,000	
Number of firms	2,500	1,500	995	4,995
Returned first questionnaire	1,844	1,132	668	3,644
Response rate	74%	75%	67%	73%
Sent second questionnaire	26	97	527	650
Returned second questionnaire	13	63	342	418
Response rate	50%	65%	65%	64%
Weights used in analyses	987.2444	90.9093	1.0000	

Based on our response rates, we computed sampling errors for the major findings in this report. In table II.2, we report our estimate for some of these findings, along with the sampling error for each estimate. The sampling errors, when added to and subtracted from the estimates, provide the 95 percent confidence interval for each major finding.

Appendix II
Sampling and Survey Information

Table II.2: Sampling Errors for Major Findings

Variable	Estimate	Sampling error
Total number of firms to which findings can be generalized	792,974	40,601
Number of firms with 401(k) plans	35,014	9,993
Percent of firms with 401(k) plans	4.4	1.2
Total employees eligible	5.2 million	0.8 million
Total employees contributing	3.2 million	0.6 million
Percent of eligible employees contributing	61.7	15.2
Total contributions, 1986	\$8.8 billion	\$0.6 billion
Employee contributions, 1986	\$6.4 billion	\$0.3 billion
Employer contributions, 1986	2.4 billion	0.3 billion
Total plan assets	\$70.4 billion	\$11.3 billion
Loans outstanding as percent of total assets	1.08	0.03
Hardship withdrawals as percent of total assets	0.28	0.01
Percent assets in guaranteed interest and balanced funds	41.5	6.6
ADP for higher paid group	5.4	1.7
ADP for lower paid group	3.8	1.3

Glossary

Balanced Fund	A fund with an investment mix of stocks and bonds.
Cafeteria Plan	A program through which employees determine how dollars are to be allocated among a variety of benefits, such as retirement plans, health insurance, and vacation time.
Defined Benefit Pension Plan	A retirement plan, other than an individual account plan, which provides a definite formula for computing an employee's benefits.
Employee Stock Ownership Plan (ESOP)	An employee plan and trust established to receive stock of an employer and other assets for allocation to the individual accounts of participating employees.
Equity Fund	A fund that invests in common stocks.
Futures	Contracts for the sale and delivery of commodities at some time in the future.
Guaranteed Interest Contract	A fixed income investment instrument that provides a fixed rate of interest, also known as a guaranteed investment contract.
Index Fund	An investment fund containing securities selected to produce a rate of return substantially the same as that of a designated securities index.
Individual Retirement Account (IRA)	A retirement plan, originally designed for employees not covered by employer plans but later extended to most individuals, which allows for the deduction (within limits) of contributions to an individual plan trust from personal income for tax purposes.
Keogh Plan	A qualified pension or profit sharing plan designed for self-employed persons.

Marketable Bond	A bond for which there is a ready market, and that is intended to be held for a short period.
Money Market Fund	A fund designed to invest in high interest instruments, such as government securities and bank certificates, while providing relative safety.
Money Purchase Pension Plan	A plan in which employer contributions are determined for specific individuals, generally as a percentage of compensation, and the benefits provided each employee are those that can be purchased with those contributions.
Option	An agreement to buy or sell a specific property or security (such as stock) at a stipulated price within a stated time period.
PAYSOP	An employee stock ownership plan eligible for tax credits based on employee payroll.
Profit-Sharing Plan	A plan that provides a predetermined formula for sharing the profits of a corporation among the employees or their beneficiaries.
Stock Bonus Plan	A plan similar to a profit-sharing plan, except that the benefits may be distributed as employer stock rather than cash and the contributions need not be based on profits.
Thrift or Savings Plan	A retirement plan that requires employees as well as the employer to contribute. Employees may determine the level of contribution they choose to make.

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